



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,885	10/31/2003	Debargha Mukherjee	100201426-1	2006

22879 7590 09/15/2009
HEWLETT-PACKARD COMPANY
Intellectual Property Administration
3404 E. Harmony Road
Mail Stop 35
FORT COLLINS, CO 80528

EXAMINER

ANYIKIRE, CHIKAODILI E

ART UNIT	PAPER NUMBER
----------	--------------

2621

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

09/15/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM
ipa.mail@hp.com
jessica.l.fusek@hp.com

Office Action Summary	Application No. 10/698,885	Applicant(s) MUKHERJEE, DEBARGHA	
	Examiner CHIKAODILI E. ANYIKIRE	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 38-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 38-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This application is responsive to application number (10698885) filed on October 31, 2003. Claims 38-47 are pending and have been examined.

Response to Arguments

2. Applicant's arguments with respect to claims 38-47 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 38-40, 42-43 and 45 rejected under 35 U.S.C. 102(e) as being anticipated by Song (US 2003/0031380).

As per **claim 38**, Song discloses a method comprising:

predecoding a compressed video stream including A-frames and B-frames so that it includes pre-decoded A-frames and undecoded B-frames, said A-frames being anchor frames and including either only I-frames or only I-frames and P-frames (Fig 11 step 215; paragraph [0104] lines 9-11); and

after said predecoding, in response to a random-access frame request for a target frame (Fig 11 element 203; paragraph [0104] line 13),

in the event said target frame is an A frame, displaying said frame without further decoding as a function of another frame or frames (paragraph [0087] and [0090] lines 6-11; Song explains that a pre-decode is done of the anchor frames so that decoding is not needed later), and

in the event said target frame is a B frame, decoding said frame as a function of said A-frames to yield a decoded B frame and displaying said decoded B frame (paragraph [0094] lines 14-15).

As per **claim 39**, Song discloses a method as recited in claim 38 wherein said video stream includes a table of contents (Fig 11 element 205; paragraph lines 11-12).

As per **claim 40**, Song discloses a method as recited in claim 38 wherein said table of contents identifies said frames by sequence and image (paragraph [0105] lines 4-8).

As per **claim 42**, Song discloses a method as recited in claim 38 further comprising encoding said video stream so that said A-frames include only I-frames and said B-frames are ordered in said video stream to provide for spatial scalability (paragraph [0091]).

As per **claim 43**, Song discloses a system comprising computer-readable storage media encoded with a video processing program for encoding or decoding a video stream in which all B-frames are preceded by all A-frames and said A-frames are

preceded by a table of contents, said A-frames including either only I-frames or only I-frames and P-frames (paragraph [0094] lines 14-16 and claim 14).

As per **claim 45**, a system as recited in claim 43 further comprising a processor for executing said video processing program so as to decode said video stream so that said A-frames are pre-decoded (paragraph [0103]).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 41, 44, and 46-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Song (US 2003/0031380) in view of well-known knowledge.

As per **claim 41**, Song discloses a method as recited in claim 38.

However, Song does not explicitly teach wherein said predecoding involves predecoding motion vectors associated with P-frames, so that, in the event said target frame is a B-frame, said decoding is in part a function of predecoded motion vectors.

In the same field of endeavor, motion vectors are known in the art and are inherently associated with MPEG encoding. Song mentions using MPEG and therefore it would be have been obvious that when the invention of Song pre-decoded the P-frames that the motion vectors associated with the P-frames were also decoded. Official Notice is taken.

Therefore, it would have been have been obvious for one having skill in the art at the time of the invention to modify the invention of Song in view of well-known knowledge in the art. The advantage being a means for fast display as discussed in Song (paragraph [0087] and [0088]).

Regarding **claim 44**, arguments analogous to those presented for claim 41 are applicable for claim 44

Regarding **claim 46**, arguments analogous to those presented for claim 38 are applicable for claim 46.

Regarding **claim 47**, arguments analogous to those presented for claim 41 are applicable for claim 47.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHIKAODILI E. ANYIKIRE whose telephone number is (571)270-1445. The examiner can normally be reached on Monday to Friday, 7:30 am to 5 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (571) 272 - 7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2621

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Marsha D. Banks-Harold/
Supervisory Patent Examiner, Art Unit 2621
/Chikaodili E Anyikire/
Patent Examiner AU 2621